To: Card, Joan[Card.Joan@epa.gov]; Cantor, Howard[cantor.howard@epa.gov]

From: Schmit, Ayn

**Sent:** Thur 2/6/2014 11:55:17 PM

Subject: FW: Desmog Blog.com: In Pavillion, Wyoming Water Contamination Case, Questions

Continue To Swirl About Oil and Gas Industry's Role

From: Mylott, Richard

Sent: Thursday, February 06, 2014 4:02 PM

To: Schmit, Ayn; Oberley, Gregory; Hestmark, Martin

Subject: Desmog Blog.com: In Pavillion, Wyoming Water Contamination Case, Questions Continue To

Swirl About Oil and Gas Industry's Role

## In Pavillion, Wyoming Water Contamination Case, Questions Continue To Swirl About Oil and Gas Industry's Role







A funny thing happened when Idaho Dept. of Lands Oil and Gas Program Manager Robert Johnson stepped to the microphone at a public hearing this past fall. He said something that many have long suspected, but few officials have actually been willing to say bluntly and publicly.

He said that the oil and gas industry was responsible for the contaminated groundwater in Pavillion, Wyoming — referring to a <u>high-profile case</u> where environmentalists have alleged oil and gas drilling and fracking caused a town's water supplies to go bad.

"Everybody's heard of Pavillion, Wyoming," Mr. Johnson said. "OK. Pavillion was a leaking above ground pit that was not lined."

"Did the industry cause it?" Mr. Johnson said. "Yes they did."

Later in his talk, Mr. Johnson also pointed to a faulty cement casing in a natural gas well as another factor in the case, describing EPA data showing pollution was caused "by a bad cement job on an Encana well that was drilled in 1985."

His statement is noteworthy because, before coming to Idaho, Mr. Johnson was directly involved with the Pavillion investigation. He <u>worked for</u> the groundwater division of the Wyoming State Engineer's Office, which has taken the lead role in the contamination investigation.

The comments, which were <u>recorded</u> by county officials and distributed by anti-drilling advocates, were also significant because they were so candid and because the state of Wyoming maintains that more study is needed before blame can be assigned. The state is currently investigating the Pavillion incident and <u>expects to publish</u> a report in September of this year.

Asked about the comments, Idaho state officials said that the remarks about wastewater pits were intended "to illustrate that the State of Idaho requires lined pits to avoid surface contamination," adding that Mr. Johnson, an Idaho official, was not speaking on behalf of the State of Wyoming. Mr. Johnson worked for the oil and gas industry before joining the Wyoming State Engineer's Office.

His allegation directly contradicts the position of oil and gas company, Encana, which still maintains on its website that tests show "no impacts from oil and gas development" on Pavillion's groundwater. This fall, Encana, which drilled the oil and gas wells that locals suspect caused the pollution, made a \$1.5 million grant to Wyoming to help fund the state report, which left environmentalists crying foul over the potential for the funding to undermine the investigation's independence and influence results.

It is the latest development in an ongoing and embarrassing drama that has left locals reliant on <u>water</u> <u>cisterns</u> for their drinking water while state, federal and industry experts battle over the causes and public relations executives attempt to gin up doubts about the oil and gas industry's role.

In June, the EPA <u>announced</u> it was pulling out of Pavillion, amid concerns about the expense of the investigation and allegations from drilling advocates that its 2011 <u>draft report</u> on Pavillion would not survive peer review. The 2011 EPA report made headlines because its data suggested that contamination was linked to fracking, contradicting industry claims that the process had never contaminated groundwater.

Such claims have been widely debunked since then. But the industry still often repeats them.

While the oil and gas industry asserted that the natural gas found in the water had formed naturally in the aquifer's shallow rock layers (so-called biogenic gas), the EPA tests showed the gas bore the distinct signature of gas formed far below the surface (thermogenic gas). The discovery of thermogenic gas, along with chemicals associated with fracking, was strong evidence that fracking could have contaminated the town's water.

Mr. Johnson's description of the EPA's 2011 findings highlight a key issue with the onshore drilling boom that's swept across the U.S. Lost in the debate over fracking's hazards are the hazards of other stages of extracting the oil and gas.

Well integrity, many experts say, is a key issue. Industry studies have found that over a 30 year period, between 2 and 60 percent of wells <u>suffer</u> from faulty casings — a major problem even at the lowest end of the spectrum, because <u>over a million</u> new oil and gas wells are expected to be drilled in the U.S. over the next few decades.

The EPA's 2011 data showing contamination surrounding the oil and gas industry's wastewater pits and

the potential problems with gas well casings, layers of cement and steel that are supposed to keep oil and gas isolated, drew far less attention than the report's implications surrounding the hydraulic fracturing process.

The unfolding story of the Pavillion investigation highlights the hazards not only of the onshore drilling rush, but also the political hazards of using fracking as the exclusive focus of the debate over the risks.

In 2009, Pavillion residents first contacted the EPA to ask the agency to investigate what had gone wrong with their water, which had suddenly turned brown, fizzed, and smelled like an oily puddle on pavement. Pavillion residents like John Fenton and <u>Louis Meeks</u> were interviewed in the documentary Gasland, helping to draw national attention to their situation.

In December, 2011, the EPA published a draft report that <u>suggested</u> fracking was responsible for the water contamination — and all hell broke loose.

The agency's draft came <u>under fire</u> from oil and gas companies who claimed that EPA had bungled the investigation and made numerous technical mistakes. They argued that EPA had used a sample size that was too small and potentially even caused the contamination they found themselves when they were drilling test wells.

"The Agency has failed to address significant concerns raised with the process and conclusions of the draft report, including ... the use of a very limited and incomplete data sets to draw technically inadequate conclusions," wrote Senators David Vitter and James Inhofe in a Jan. 17, 2013 <a href="Letter">Letter</a> to the EPA questioning the draft report in detail.

The EPA, which had pointed to the costs of drilling the test wells as their primary constraints in the investigation, found itself under fire — and also under fiscal pressure. <u>Sequestration</u> hit. The agency's budget was <u>threatened</u> by fiscal conservatives and from drilling proponents in Congress alike.

So this summer, the EPA <u>announced</u> that it was pulling out of the Pavillion case, leaving a cloud of suspicion around its 2011 report's conclusions.

Industry public relations experts made the most of the EPA's retreat. "If the EPA had any confidence in its draft report, which has been intensely criticized by state regulators and other federal agencies, it would proceed with the peer review process," Energy In Depth spokesman Steve Everley told reporters.

But lost in the hullabaloo was the fact that EPA still backed the data in the 2011 report, and it extracted promises from Wvoming officials to incorporate that data in the state's investigation.

The Pavillion withdrawal was <u>part of a wave</u> of abandoned EPA fracking investigations. The agency <u>backed away</u> from its investigation into <u>Dimock, PA</u> and into allegations that Range Rources polluted Steve Lipsky's water well in Texas. Drilling supporters suggested that the investigations had been a politically-motivated witch-hunt, unsupported by science.

Within the past month, however, new life has been breathed into the investigation in Texas, after the EPA's internal watchdog found that the agency had solid reasons to pursue its investigation. And the EPA never concluded that the industry hadn't contaminated Dimock, Pennsylvania's water, it simply said that it wasn't worth spending the money to pursue the investigation because affected residents now had or expected to arrange for access to clean drinking water.

The long back and forth over these high profile cases also brings into stark relief a major problem with policing the oil and gas industry: figuring out exactly how companies caused pollution isn't just technically challenging, it's expensive. The EPA's draft report may have suffered technical flaws or it may have been sound -- without a peer review process, we'll never know. But the agency was already operating on a

budget that limited its ability to conduct a full investigation.

So if the debate over fracking unfolds by the industry's terms, pollution only "counts" if it was directly caused by the fracking process itself — spills and other leaks, they argue, aren't relevant to whether fracking itself is risky.

But then, spending money to conclusively and indisputably prove that fracking caused contamintion is costly — too expensive, in fact, for the federal government to undertake. And without proof that fracking caused harm, they argue, the process should remain unregulated.

All this, of course, brings us back to Mr. Johnson. If he is correct, the oil and gas industry destroyed much of the town of Pavillion's drinking water supplies, and the industry arguments about the threats and true costs of drilling need to be reconsidered.

With more than 15 million people already living near a new oil and gas well, and millions more expected as the onshore drilling rush progresses, what happened in Pavillion — both to the town and to the EPA's investigation — is a cautionary tale for us all.